Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-4. (Canceled).

5. (Currently Amended) A vapor phase growth apparatus comprising a susceptor for performing a vapor phase growth of a silicon epitaxial layer on a main surface of a silicon single crystal substrate while heating the silicon single crystal substrate from both sides while it is ~~placed~~ on a pocket formed on ~~a susceptor~~the susceptor, ~~from both sides,~~ wherein

the pocket has an outer peripheral side part which supports a rear surface of a~~the~~ silicon single crystal substrate and an inner peripheral side part which is kept in a state of being more recessed than the outer peripheral side part in an inside of the outer peripheral side part, and

the susceptor is formed by heat-treating a body section composed of graphite and then coating a surface of the body section with SiC, and is formed to have~~has~~ a warped inverted U-shaped longitudinal sectional shape during the heat-treating.

6. (Currently Amended) The vapor phase growth apparatus as claimed in claim 5, wherein

the pocket is formed for a silicon single crystal substrate having a diameter of 300 mm or more, and

when a silicon single crystal substrate is placed on and supported by the outer peripheral side part of the susceptor, a maximum distance between a bottom surface of the inner peripheral side part in the pocket and a rear surface of the silicon single crystal substrate is less than 0.4 mm.

7. (Previously Presented) The vapor phase growth apparatus as claimed in claim 5 wherein

the susceptor is a type of a single wafer, and

a curvature on a rear surface side of the susceptor is 1.75×10^{-5} mm^{-1} or less.

8. (Previously Presented) The vapor phase growth apparatus as claimed in claim 6 wherein

the susceptor is a type of a single wafer, and

a curvature on a rear surface side of the susceptor is 1.75×10^{-5} mm^{-1} or less.

9. (Previously Presented) A vapor phase growth method, comprising performing a vapor phase growth of a silicon epitaxial layer on a main surface of a silicon single crystal substrate using the vapor phase growth apparatus as claimed in claim 5.

10. (Previously Presented) A vapor phase growth method, comprising performing a vapor phase growth of a silicon epitaxial layer on a main surface of a silicon single crystal substrate using the vapor phase growth apparatus as claimed in claim 6.

11. (Previously Presented) A vapor phase growth method, comprising performing a vapor phase growth of a silicon epitaxial layer on a main surface of a silicon single crystal substrate using the vapor phase growth apparatus as claimed in claim 7.

12. (Previously Presented) A vapor phase growth method, comprising performing a vapor phase growth of a silicon epitaxial layer on a main surface of a silicon single crystal substrate using the vapor phase growth apparatus as claimed in claim 8.

13. (New) The vapor phase growth apparatus as claimed in claim 5, wherein a depth of the pocket has been reduced by a warp amount during the heat-treatment warping of the inverted U-shaped longitudinal sectional shape.

14. (New) The vapor phase growth apparatus as claimed in claim 13, wherein the pocket is formed for a silicon single crystal substrate having a diameter of 300 mm or more, and when a silicon single crystal substrate is placed on and supported by the outer peripheral side part of the susceptor, a maximum distance between a bottom surface of the inner

peripheral side part in the pocket and a rear surface of the silicon single crystal substrate is less than 0.4 mm

15. (New) A vapor phase growth method, comprising performing a vapor phase growth of a silicon epitaxial layer on a main surface of a silicon single crystal substrate using the vapor phase growth apparatus as claimed in claim 13.

16. (New) A vapor phase growth method, comprising performing a vapor phase growth of a silicon epitaxial layer on a main surface of a silicon single crystal substrate using the vapor phase growth apparatus as claimed in claim 14.

17. (New) A method of forming a vapor phase growth apparatus for performing a vapor phase growth of a silicon epitaxial layer on a main surface of a silicon single crystal substrate while heating the silicon single crystal substrate placed on a pocket formed on a susceptor from both sides, comprising:

forming the susceptor by heat-treating a body section composed of graphite, the susceptor having a pocket including an outer peripheral side part for supporting a rear surface of the silicon single crystal substrate and an inner peripheral side part which is kept in a state of being more recessed than the outer peripheral side part in an inside of the outer peripheral side part; and

coating a surface of the body section with SiC,

wherein the heat-treating forms a warped inverted U-shape longitudinal sectional shape in the susceptor.

18. (New) The method of forming a vapor phase growth apparatus according to claim 17, wherein the heat-treating to form the warped inverted U-shaped longitudinal section shape of the pocket reduces a depth of the pocket by a warp amount.

19. (New) The method of forming a vapor phase growth apparatus according to claim 17, wherein the warp amount reduces the depth of the pocket to less than 0.4 mm when the

pocket is formed for a silicon single crystal substrate having a diameter of 300 mm or more, and the depth corresponds to a maximum distance between a bottom surface of the inner peripheral side part in the pocket and a rear surface of a silicon single crystal substrate when the silicon single crystal substrate is placed on and supported by the outer peripheral side part of the susceptor.